

CLAIMS

1. A self-venting microwave cooking container for use with a vertical fill automated
5 machine, comprising:

a bag portion defining an opening for receiving a food product, wherein the opening is sealed after the food product has been received by said container, enclosing a predetermined volume within said bag portion for subsequent cooking of the food product in the container;

10 a tray portion positioned within and adjacent a floor of said bag portion and having a surface for supporting the food product; and

a venting configuration in fluid communication with the volume enclosed within said bag portion for preferential venting at a predetermined location when the food product is cooked in said container.

15 2. The microwave cooking container as recited in claim 1, wherein said predetermined location is along a portion of the seal closing the opening of the bag portion.

3. The microwave cooking container as recited in claim 2, wherein said venting
20 configuration comprises:

at least one steam guide defining a central pocket in the seal with a tip ending before the edge of the seal, the central vent weakening a portion of the seal adjacent the tip of said at least one steam guide and being in fluid communication with the volume enclosed within

said container to allow movement of steam from said container into said at least one steam guide, such that, when said container is heated, steam and pressure are directed towards the tip of said at least one steam guide, causing pressure to be concentrated at the weakened portion of the seal, resulting in the seal being preferentially broken adjacent the tip of said at least one steam guide.

5

4. The microwave cooking container as recited in claim 3, said venting configuration further comprising:

a pair of steam horns associated with and positioned on either side of said at least one steam guide, the steam horns defining side pockets in the seal, the side vents further
10 weakening the portion of the seal adjacent the tip of said at least one steam guide and being in fluid communication with the volume enclosed within said container to allow movement of steam from said container into the steam horns, such that, when said container is heated, steam and pressure are preferentially directed towards the tip of said at least one steam guide, causing pressure to be concentrated at the weakened portion of the seal, resulting in the seal being
15 preferentially broken adjacent the tip of said at least one steam guide.

5. The microwave cooking container as recited in claim 1, wherein the surface of said tray portion has a pattern designed for optimal cooking of a particular type of food product.

20 6. The microwave cooking container as recited in claim 1, and further comprising an insulating handle for providing protection from heat-related injury when said container is grasped following cooking of the food product.

7. The microwave cooking container as recited in claim 1, wherein said bag portion is constructed from a material capable of being printed with graphics and/or information.

8. The microwave cooking container as recited in claim 7, wherein said material is
5 polypropylene.

9. A self-venting microwave cooking container for use with a vertical fill automated machine, comprising:

a tray portion having a bottom surface and a side wall extending therefrom and
10 terminating at an upper rim that is in a plane substantially parallel to the bottom surface of said tray portion, said upper rim circumscribing an opening into the interior of the tray portion;

a bag portion defining an opening for receiving food product at one end, said bag portion also defining a lower opening that is substantially the same size and shape as the opening into the interior of the tray portion, allowing a bottom side of the bag portion to be joined to the
15 upper rim of the tray portion, with the lower opening of the bag portion substantially in registry with the opening into the interior of the tray portion; and

a venting configuration in fluid communication with a volume enclosed within said tray portion and said bag portion;

wherein the opening into the bag portion is sealed after the food product has been
20 received by said container for subsequent cooking of the food product in the container; and

wherein said venting configuration causes preferential venting at a predetermined location when the food product is cooked in said container.

10. The microwave cooking container as recited in claim 9, wherein said venting configuration comprises:

at least one steam guide defining an indentation along the upper rim of said tray portion and being positioned adjacent a weakened area of said bag portion, such that, when said container is heated, steam and pressure are directed towards the tip of said at least one steam guide, causing pressure to be concentrated adjacent the weakened area of said bag portion, resulting in the bag portion being preferentially broken at the weakened area.

11. The microwave cooking container as recited in claim 10, wherein a tab is created when the weakened area of said bag portion is broken, said bag portion additionally including a second weakened area, trailing substantially linearly from the tab, such that the tab may be grasped and pulled in the direction of the second weakened area to facilitate access to the food product.

12. A method for packaging food product in a microwave cooking container that includes a bag portion defining an opening for receiving the food product and a tray portion having a surface for supporting the food product, comprising the steps of:

delivering food product to said container from a vertical fill automated machine through the opening defined by said bag portion;

sealing the opening defined by said bag portion, thereby securing the food product within said container; and

providing the container with a venting configuration for preferential venting when the food product is cooked in said container.